

REMARKS

The Office Action of October 31, 2007, has been carefully considered.

Objection has been raised to the drawings under 37 CFR 1.83(a) on the basis that the structures recited in Claim 11 are not shown in the drawings. These structures have now been canceled from the claims.

Objection has been raised to the drawings on the basis that Figures 1 to 4 include multiple views in a single figure number. A new set of drawings has now been submitted in which the views have been individually labeled as suggested in the Office action, and the specification has been amended commensurate with the new drawings. Annotated drawings have also been submitted as these have been requested.

Objection has been raised to the specification based upon a lack of a defined section of "Brief Description of the Drawings" and the specification has now been amended to add this section. Objection has also been raised on the basis that the specification does not provide proper antecedent basis for the subject matter of Claim 11, and this subject matter has now been canceled from the claims.

Objection has been raised to the claims on the basis of lack of antecedent basis for terminology in Claims 9, 10 and 11 and the claims have now been rewritten to provide proper antecedent basis.

Claims 5, 10 and 11 have been rejected under 35 USC 112, second paragraph, as being indefinite for use of the terms "preferably" and "typically." The claims have now been entirely rewritten and such terminology does not appear in the new claims. Withdrawal of this rejection is requested.

Claims 1 to 5 have been rejected under 35 USC 102(b) as anticipated by Chen et al, while Claims 6 to 9 have been rejected under 35 USC 103(a) over Chen et al in view of Lewis.

Claim 11 has been rejected under 35 USC 103(a) over Chen et al in view of the admitted prior art, and this rejection has been rendered moot by cancellation of the rejected subject matter. Claim 11 has also been cited as being allowable over the art, but this is apparently in error in view of the rejection of Claim 11; it is possible that Claim 10 was intended to be found allowable.

Claims 1 through 11 have been replaced by a new set of Claims 12 through 25. Claim 12 replaces Claim 1 and is directed to a brake pad comprising at least one brake lining and a carrier plate to which the at least one lining is affixed over a first surface of the lining, the brake lining having a planar friction surface opposite to the first surface which is constructed and arranged to come into frictional contact with one face of a disc. The brake pad is provided with a heat dissipating structure which directs a heat flux to be dissipated in at least one direction substantially parallel to the planar friction surface, with the heat dissipating structure being formed at an interface between the brake lining and the carrier plate.

In addition, Claim 12 recites a structural feature found in the brake pads shown in the drawing figures, specifically that the carrier plate extends beyond the brake lining in at least one of length and width.

Other specific features of disc brake pads are recited in Claims 22 through 25, with Claim 22 reciting that the carrier plate comprises through holes in an area which extends beyond the brake lining, Claim 23 reciting that the carrier plate is made of metal and is attached to the brake lining by brazing or machining, Claim 24 reciting that the carrier plate is made of steel, and Claim 25 reciting the various materials disclosed in the specification of which the brake lining may be made. Each of these claims is fully supported by the

specification.

The Chen et al reference discloses a braking device for a bicycle which comprises a brake piece 20 having a surface intended to contact a wheel rim, and contacting on an opposite surface a resilient member 30 having ribs on at least one face thereof. The brake piece and resilient member are disposed in a mounting seat 10. The device of Chen et al, of course, is intended only for use on a bicycle and is not a disc brake pad having a friction surface which is constructed and arranged to come into frictional contact with one face of a disc. There are a number of structural distinctions between a disc brake pad and a bicycle brake as disclosed by Chen et al, and one such distinction, the extension of the carrier plate beyond the brake lining is now specifically recited in Claim 12. Other of the structural distinctions are specifically recited in new Claims 22 through 25.

Moreover, the resilient member 30 of Chen et al is not a carrier plate for the brake lining; rather, the element which corresponds to the brake lining, brake piece 20, is supported by mounting seat 10.

A further distinction relates specifically to Claim 14, which recites that the grooves in the lining or carrier plate form holes which are through holes, open at ends thereof, and through which air can pass freely.

If one compares the claimed structure to the structure shown in Figure 3 of Chen et al, it is very clear that the grooves in the resilient member 30 are contained within the walls of mounting seat 10, meaning that air cannot pass freely through the grooves whose ends are closed by the mounting seat.

Regarding Claims 6-9, the rejected claims recite bars made of heat conducting material which are part of the heat dissipating structure. The Office action alleges that Lewis

teaches the use of passage regions 22 in a pad that includes bars 27.

Lewis also relates to a bicycle brake shoe. While a soft metal support post 27 formed of a material such as lead is inserted in a cavity 22 in the brake shoe, the support post 27 comes into contact with wheel rim 29; it is not placed at an interface between a carrier plate and a brake lining. Indeed, the metal post is placed at what would correspond to the frictional surface of the brake lining, not at the interface.

Further, Lewis discloses a hole 23 in the brake lining which is intended to carry away by suction heat and the water vapor from block 21 and rim 29, and air from cavities 22. However, this hole 23 is in the center of the brake lining, and not at an interface between the brake lining and a support.

Accordingly, there is nothing in either the Chen et al reference or in the combination of Chen et al with Lewis that renders anticipates the claimed invention, or renders the claimed invention obvious, and withdrawal of these rejections is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



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